UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

In Re: Methyl Tertiary Butyl Ether ("MTBE") Products Liability Litigation

, .

Master File No. 1:00 - 1898 MDL 1358 (SAS) M21-88

Civil Action

This Document Relates To:

New Jersey Dep't of Envtl. Prot., et al. v. Atlantic Richfield Co., et al., No. MER-L-1622-07

DECLARATION OF MARCEL MOREAU

March 10, 2014

- I, MARCEL MOREAU, pursuant to 28 U.S.C. § 1746, declare under penalty of perjury, that the following is true and correct:
- 1. I am a nationally recognized expert on underground petroleum storage systems. I have worked on issues relating to such systems, including system design improvements, procedures and technologies for leak detection, modes of failure, and regulatory compliance, since 1983. In the course of this work, first as a regulator for the state of Maine and later as a consultant to various private and public entities, I have inspected many hundreds of underground petroleum storage systems around the country and have investigated dozens of storage systems where releases of petroleum products were known to have occurred. I have been retained as a testifying expert witness by the Plaintiffs in *New Jersey Dep't of Envtl. Prot., et al. v. Atlantic Richfield Co., et al.,* No. MER-L-1622-07. I have submitted the following Reports in this case:
 - A. Expert Generic Report of Marcel Moreau (9/13/12);
 - B. Expert Site Specific Report of Marcel Moreau (11/08/12);
 - C. Expert Rebuttal Report of Marcel Moreau (12/21/12);
 - D. Expert Rebuttal Report of Marcel Moreau (2/21/13); and
 - E. Expert Rebuttal Report of Marcel Moreau (3/08/13).
- 2. I submit this Declaration in support of the Plaintiffs' Motion for Approval of the settlement with Citgo Petroleum Corporation, and in response to the Declaration of Robert Powell, submitted with the BP Defendants' "Opposition to Plaintiffs' Motion for Approval of the Proposed Citgo Judicial Consent Order." I have reviewed the recent Declaration of Dr. Robert Powell (dated 11/14/13), submitted by the non-settling defendants in support of their opposition to the settlement entered into between the Plaintiffs and Citgo. Dr. Powell's Declaration describes his opinions concerning releases at the "BP/CITGO Five Points" facility, which is one of the facilities at issue in this case. Dr. Powell has expressed similar opinions in previous reports. In reports I have submitted in this case (11/08/12 and 3/8/13), I explained that the basis for Dr. Powell's opinion

that the vast majority of the MTBE at this site can be explained by a loose manway cover on the regular tank discovered in December of 1998 during the "Citgo-era" was patently incorrect. The primary reasons why Dr. Powell's scenario is false are that, 1) the fuel delivery scenario he envisions where the tank if filled beyond its capacity at every delivery is contrary to industry procedures, and 2) the gasoline inventory records for this facility from January of 1997 to December of 1998 do not support his hypothesis of a release of many thousands of gallons of gasoline during this period.

- 3. In a previous report, I opined that the presence of soil contamination provides indisputable evidence that releases of gasoline routinely occur at gasoline stations, and that "[i]t is likely these releases occurred intermittently over the entire period that these facilities were in operation." (Moreau Report, 11/08/12, Vol. I at p. 13). I further stated that this scenario applies to the BP/CITGO Five Points facility (Moreau Deposition, 4/17/13 at pp. 547-549).
- 4. While there is clear evidence that some releases associated with this facility occurred in or near the tank field, there is also evidence that releases occurred in or near the fuel dispensers and the piping connecting the tanks and the dispensers. (Moreau Report, 11/08/12, Vol. I at p. 18). Specific evidence pointing to releases from the dispensers and associated piping at this facility includes:
 - The discovery of contamination in a soil sample taken near the dispenser islands in 1996 (sample S20, 6.53 ppb of MtBE and 141,000 ppb of TBA at 5 ft below grade, Moreau Report, 11/08/12, Vol. I at p. 16).
 - More extensive and significant soil contamination was discovered in soil samples taken in 1999 south of the dispenser islands (Sample T-1, 1,100 ppb MtBE at a

- depth of 11-12 ft below grade; Sample T-2, 2,000 ppb MtBE at 11.5 ft below grade, Moreau Report, 11/08/12, Vol. I at p. 17). These samples were taken at depths significantly above the water table and at a points upgradient from tank field. (Aquilogic Revised Site Summary for 5 Points BP Service Station, January 2013, Figure 7ai, Appendix F; hereafter, "Aquilogic, 2013")
- MTBE was also detected in soil along a product line between the tank and the dispenser island in 2002 (Sample GP-16, 1,100 ppb at 3.5-4.0 ft below grade, Moreau Report, 11/08/12, Vol. I at p. 18).
- MtBE was detected again in soils south of the dispenser islands in a soil boring conducted in 2008 (Sample TB-1, 420 ppb MtBE at a depth of 27.5-28.0 ft, Aquilogic, 2013, Appendix D). While this sample was taken at a depth near the water table, the location is substantially upgradient of the tank field (Aquilogic, January 2013, Figure 7ai, Appendix F).
- 5. In addition, water quality data from MW-1 provide evidence of a substantial release of MtBE gasoline from the dispenser area that occurred between the fall of 1998 and the spring of 2002 (Aquilogic, 2013, Appendix A). MW-1 is located immediately adjacent to the eastern end of the dispenser islands (Aquilogic, 2013, Figure 2). This location is significantly upgradient of the tank field. When first sampled in September of 1998, the water in this well was ND for benzene and MtBE. When next sampled in April of 2002, the well contained free product. When next sampled in August of 2004, the water in MW-1 was contaminated with 8,370 ppb of benzene and 11,800 ppb of MtBE.

- 6. Dr. Powell's declaration states that the USTs (which I understand to mean the tanks, product lines, and dispensers) which were installed in 1996 are still in service (Powell Declaration at p. 2). The appearance of free product in a monitoring well upgradient from the tank field and immediately adjacent to the dispensers between 1998 and 2002 clearly indicates that the piping system and dispensers installed in 1996 were still subject to intermittent releases and that the secondary containment system installed in 1996 was not adequate to prevent releases from reaching soil and groundwater. Although after 1996 the dispensers were likely equipped with dispenser sumps designed to contain releases, the appearance of free product in MW-1 in 2002 is evidence one or more of these sumps was not liquid tight. Dispenser sumps were rarely tested for integrity when they were installed and were frequently found to be leaking when they were tested (Moreau Report, 9/13/12, p. I-8).
- 7. While it is uncertain whether the dispenser area release that resulted in free product in MW-1 in 2002 occurred before or after BP branded the site in October of 2001, it is clear that the piping and dispensing systems that BP used at this site were not sufficient to prevent releases and consequent environmental contamination.
- 8. Dr. Powell states that, "These third generation USTs [installed in March 1996] remain in operation today" (Powell Declaration, p. 2). This means that the USTs installed during the Citgo era in the mid-1990s remained in service throughout the time the facility was branded by BP. MtBE was present in the gasoline from October 2001, the time when the facility was first branded by BP, until MtBE was removed from the gasoline supply in the spring of 2006 (Moreau Report, 11/08/12, p. 15). The data at the BP/Citgo Five Point site are consistent with intermittent and ongoing releases that typically occur in the dispenser area. Such releases would have no

doubt continued after BP branded gasoline containing MtBE was delivered to the UST systems at the BP/Citgo Five Points site.

- 9. Dr. Powell provides no explanation for the presence of free product in MW-1 in any of his reports (Moreau Report, 3/08/2013, p. 19). Nor does he provide any explanation for the MTBE in the soil discovered near the dispenser islands and adjacent to the piping. He simply does not address these facts. I stand by my opinion that releases into the environment associated with the dispensers and piping occurred at this site throughout the time that MtBE was present in the gasoline.
- 10. Nothing in Dr. Powell's current declaration alters my own findings and opinions, and I stand by my original opinions concerning this site.

MARCEL MOREAU

Marul Moreau

March 10, 2014